Wednesday Evening Film Program
Organized by
Charles Csuri

"Newtonian II," by Lillian Schwartz, Bell Laboratories, Holmdel, New Jersey. Color, Sound, 5½ minutes, 1978.

    Patterns of abstract geometric shapes.

"Tomato Bushy Stunt Virus," (Preliminary version) by Arthur Olson and Nelson Max, Lawrence Berkeley Laboratory, Color, 4 minutes, 1980.

    It shows the structure and arrangement of the protein molecules in the coat of the virus. Visible surfaces computed using ATOMLLL on a CDC 7600 at Lawrence Berkeley Lab. Shading and highlights computed on a Sperry Univac V75 minicomputer at Lawrence Livermore National Lab and plotted on a Dicomed D-48 color film recorder.

"NASCAP-SCATHA," by Jack Cassidy, Systems, Science and Software, La Jolla, California. Black and White, Sound, 6½ minutes, 1980.

    NASCAP is a computer program that simulates spacecraft electrical charging. SCATHA is a scientific satellite. The movie shows a NASCAP simulation of SCATHA.

"Emulation of Real-Time Texture Generation," by Johnson K. Yan, Lish, Y. Chen and Nicholas S. Szabo, Singer-Link Division, Sunnyvale, California. Color, 6 minutes, 1980.

    This movie shows texture generation on a planar surface. Texture generation adds detail on the surface to provide better motion and attitude cue to the pilot. The movie is generated in nonreal-time by software which emulates the real-time hardware implementation of texture generation.

"Russian Ant," by Dimitri Okhotsinsky, Institute for Applied Mathematics, Moscow, U.S.S.R. Black and White, 10 minutes, 1976.

    Mathematical modeling of a hexapod vehicle moving in 3-D over irregular terrain.

"Spiral," by Tom DeFanti, Dan Sandin and T. Pettigrew, University of Illinois, Chicago Circle. Color, Sound, 7 minutes, 1979.

    The Graphics Symbiosis System was used with the Sandin Image Processor to produce this videotape.

"Demo Reel," by Digital Effects (J. Rosebush, D. Cox, D. Leich, V. Loen, G. Miller, R. Hoffman and D. L. Deas), New York City. Color, Sound, 3 minutes, 1980.

    Short segments from various commercial productions.

"Three 30 Second Commercials," by Digital Effects, New York City. Client Scientific American, and the Marseller Agency, New York City. Color, Sound, 1980.

"Trailer for The Works," by The New York Institute of Technology Computer Graphics Laboratory. 1½ minutes, Color, 1980.

   For a forthcoming feature length computer animated film.

"Two Space," by Larry Cuba, Venice, California. Color, Sound, 7½ minutes, 1980.

   Awarded the prize for animation at The Athens International Film Festival, 1980.

"Braun" Study and final. Director Tom Barron, Technical Director William Kovacs, Abel and Associates. Color, Sound, 1 minute, 1980.

"Canon P10D" Final. Director Tom Barron, Technical Director William Kovacs, Abel and Associates. Color, Sound, 30 seconds, 1980.

"AT & T" Study and final. Director William Kovacs, Animator Con Pederson, Abel and Associates. Color, Sound, 1 minute, 1980.

"Citicorp" Logo. Director John Grower, Abel and Associates. Color, Sound, 10 seconds, 1980.

"Black Hole" Producer Neo Plastics, Abel and Associates. Color, Sound, 1 minute, 1980.

   The material from Abel and Associates is computer animation using an Evans and Sutherland line drawing system.

"Curious Phenomena," by Richard Weinberg, University of Minnesota and Stan VanDerBeek, University of Maryland. Color, Sound, 6 minutes, 1980.

   The film was produced using an electronic scene generator at NASA's Johnson Space Center in Houston, Texas. The electronic scene generator is controlled by a digital computer and creates color television images at the rate of 25 frames per second, the television monitor is then filmed directly by a synchronized 16mm camera.

"Frank's Latest," by Frank Crow, Ohio State University. Color, 20 seconds, 1980.

   It was made with dithered color on a 10 bit frame buffer using a scan line by scan line priority display algorithm.

"ABC 80" (10 sec.), "ON TV" (10 sec.), "Phillips" (40 sec.), Production Company Marks and Marks, Creative Direction Harry Marks, Art Direction Dale Herigstad and Harry Marks, Design Colin Cantwell, Computer Animation Colin Cantwell.

   The three spots were produced using an HP9845 system. The sequences were created by plotting each frame with a HP9872 plotter, photographing the resulting drawings on an animation stand and adding the various optical effects. The Phillips spot required 7500 drawings.

"Interactive Molecular Graphics," by Thomas Ferrin and Robert Langridge, University of California, San Francisco. Color, 10 minutes, 1980.

This film depicts the usage of high performance interactive color graphics for the display of three dimensional molecular models. The film was generated on a color shadow mask monitor using an Evans and Sutherland Picture System 2 display.

"Vincent," by David DeFrancisco, Alvy Ray Smith, Lucasfilm, and Neelon Crawford, Interface Films. Color, 2 minutes.

3-D computer graphics.

"JPL's COSMOS Sample Reel," by James Blinn and Pat Cole, Jet Propulsion Laboratory. Color, 17 minutes, 1980.

Computer animation simulating scientific phenomena for Carl Sagan's COSMOS series to be aired on Public Television in the fall of 1980. Sequences presented will be gravitational fields, exploding radio galaxies, galactic dynamics, human evolution, Venus rotation, planets and DNA replication.

"NYIT 1980 Demo Tape," by the New York Institute of Technology Computer Graphics Laboratory. Color, Sound, 10 minutes.

Applications to commercial TV and film.

"Delta One," by Ron Hays, Hollywood, California. Color, Sound, 6½ minutes, 1979-80.

Computer animated visual music and dance from his videomusic album ODYSSEY.

"Twilight Zone," by Ron Hays, Hollywood, California. Color, Sound, 3½ minutes, 1979-80.

Computer animation and videovisual effects as it appeared on NBC's BIG SHOW.

"Cheap Tricks," by Lou Katz, Jinko Gotoh and Ron Teichman, Columbia University. Color, Sound, 6 minutes, 1980.

"Information International 1978 Sample Reel," by Information International Inc. Los Angeles, California. Color, Sound, 8 minutes, 1978.

A demonstration of digital scene simulation tests and commercial contracts produced prior to January, 1978. The reel has been shown to potential customers illustrating what can be done with high resolution simulation, computer output which suspends disbelief.

"New Developments in CGI," by The Evans and Sutherland Corporation. Color, 10 minutes, 1976.

    The following scenarios were videotaped from the Lufthansa Day/Night Visual Image Generator developed and manufactured for Lufthansa Airlines, Frankfurt, Germany, by Evans & Sutherland Computer Corporation, Salt Lake City, Utah, in conjunction with Redifon Flight Simulation Limited, Crawley, England; the Computer Aided Operations Research Facility System (CAORF), National Maritime Research Center, Kings Point, New York, developed and manufactured by Evans & Sutherland Computer Corporation, in conjunction with Aeronutronic Ford Corporation, Palo Alto, California; and, the NASA-JSC Daylight CGI System developed and manufactured for the NASA-Johnson Space Center, Houston, Texas, by Evans & Sutherland Computer Corporation.

"Skippy Peanut Butter Jars," By Copper Giloth, University of Illinois, Chicago Circle. Color, Sound, 3½ minutes, 1980.

"Computer Simulator for Acoustic Phased Arrays," by Andre J. Duerinckx, Yorktown Heights, New York. Black and White, 4 minutes, 1980.

    Animation of the acoustic pressure waves in the near-field generated by a linear phased array excited with short pulses. Each frame required 2 minutes of CPU time per 10,000 sample points. The system was run on an IBM 370/168 system running VM/370. The graphics routines used the GCG3D software with the embedded Halo Line Effect algorithm.